

PATENT
Serial No. 10/020,055
Amendment in Reply to Final Office Action mailed on January 10, 2006

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for a cordless modem comprising:
 - a base station comprising means for connection with a communication line;
 - a remote unit for connection with an interface of a modem;
 - at least one booster station;
 - said base station including means for wireless communication with said remote unit and said at least one booster station;
 - said remote unit comprising means for wireless communication with at least said base station;
 - said base station including means for testing using

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wireless communication between said base station and said remote unit and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between said base station and said remote unit.

2. (Original) The system according to Claim 1, wherein said means for testing includes means for comparing levels of test patterns communicated between said base station and said remote unit.

3. (Currently Amended) The system according to Claim 2, wherein said ~~further comprising~~ at least one booster station being is in wireless communication with said base station and said remote unit, said at least one booster station including receiving means for receiving information transmitted from said base station and said remote unit and transmitting means for transmitting information to said base station and said remote unit.

4. (Currently Amended) The system according to Claim 2, wherein said base station includes means for connection with a

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first electrical outlet, and

~~said system further comprises~~ at least one booster station
being in wireless communication with said remote unit,

said booster station including means for connection with a
second electrical outlet, and said base station and said at least
one booster station including means for communication over a common
electrical wiring system between said first and second electrical
outlets.

5. (Original) The system according to Claim 4, wherein said at
least one booster station includes means for testing and selecting
a frequency providing a strongest reception from a plurality of
available channels for wireless communication between said booster
station and said remote unit, and when reception between said at
least one booster station and said remote unit is stronger than
reception between said base station and said remote unit, said base
station communicates with said at least one booster station only
via the common electrical wiring system.

6. (Currently Amended) ~~The A communication system according to~~

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Claim 5, comprising:

a base station, a booster station and a remote unit configured for wireless communication among each other, said base station being configured for connection to said booster station via a common electrical wiring system;

wherein said base station periodically tests wireless communication with said remote unit and when reception between said base station and said remote unit is stronger than reception between said ~~at least one~~ booster station and said remote unit, said base station stops communicating with said ~~at least one~~ booster station via the common electrical wiring system and wirelessly communicates directly with said remote unit.

7.(Original) The system according to Claim 1, wherein said remote unit is arranged in a case of a portable computer.

8.(Original) The system according to Claim 3, wherein said remote unit is arranged in a case of a portable computer.

9.(Original) The system according to Claim 5, wherein said

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remote unit is arranged in a case of a portable computer.

10. (Original) The system according to Claim 7, wherein said remote unit includes an antenna arranged on the case of the portable computer so that it is oriented upward when the computer is open.

11. (Currently amended) A method for providing a system for a cordless modem; comprising the steps of:

(a) providing a base station adapted for connection with a communication line;

(b) providing a remote unit adapted for connection with an interface of a modem;

(c) providing wireless communication ~~between~~ among said base station, at least one booster station, and said remote unit; and

(d) testing wireless transmissions between said base station and said remote unit;

(e) comparing a received signal strength from the remote unit with the wireless transmissions transmitted by the base station in step (d); and

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(f) repeating steps (d) and (e) for a plurality of channels having different frequencies, and selecting a channel having a strongest signal strength from among the plurality of channels.

12. (Currently Amended) The method according to Claim 11, wherein step (d) comprises generating a test pattern ~~from~~for transmission between said base station and said remote unit.

13. (Currently amended) The method according to Claim 11, further comprising:

(g) ~~providing at least one booster station in wireless communication with said base station and said remote unit, said at~~
least one booster station receiving and re-transmitting communications between said base station and said remote unit.

14. (Currently amended) The method according to Claim 12, further comprising:

(g) ~~providing at least one booster station in wireless communication with said base station and said remote unit, said at~~
least one booster station receiving and re-transmitting

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communications between said base station and said remote unit.

15. (Original) The method according to Claim 13, wherein step (a) includes providing a connection for said base station to an electrical outlet of an electrical system; and

step (g) includes providing the at least one booster station with a connection to another electrical outlet of said electrical system; and

(h) providing means for said base station and the at least one booster station to communicate over the electrical wiring system.

16. (Original) The method according to Claim 14, wherein step (a) includes providing a connection for said base station to an electrical outlet of an electrical system; and

step (g) includes providing the at least one booster station with a connection to another electrical outlet of said electrical system; and

(h) providing means for said base station and the at least one booster station to communicate over the electrical wiring

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system.

17.(Original) The method according to Claim 15, further comprising:

(i) testing and selecting a frequency channel providing a strongest reception from a plurality of available channels for wireless communication between said booster station and said remote unit.

18.(Original) The method according to Claim 16, further comprising:

(i) testing and selecting a frequency channel providing a strongest reception from a plurality of available channels for wireless communication between said booster station and said remote unit.

19.(Original) The method according to Claim 17 further comprising:

(j) when reception between said at least one booster station and said remote unit is stronger than reception between said base

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station and said remote unit, communicating by said base station with the at least one booster station only via the electrical wiring system.

20.(Original) The method according to Claim 18 further comprising:

(j) when reception between said at least one booster station and said remote unit is stronger than reception between said base station and said remote unit, communicating by said base station with the at least one booster station only via the electrical wiring system.

21.(Original) The method according to Claim 17 further comprising:

(j) periodically testing wireless communication with said remote unit and when reception between said base station and said remote unit is stronger than reception between the at least one booster station and said remote unit, said base station stops communicating with the at least one booster station via the common electrical wiring system and communicates directly with said remote

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unit by wireless communication.

22.(Original) The method according to Claim 21, further comprising:

(k) periodically testing wireless communication with said remote unit and when reception between said base station and said remote unit is stronger than reception between the at least one booster station and said remote unit, said base station stops communicating with the at least one booster station via the common electrical wiring system and communicates directly with said remote unit by wireless communication.